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**To:** Commissioner For Patents  
**From:** David F. Janci  
**Attn:** Examiner Alicia Chevalier  
Art Unit 1772

**Fax:** (571) 273-8300 **Date:** 10/17/06

**Phone:** **Pages:** 8

**Re:** Notice of Appeal & Pre-Appeal Brief **CC:**

Patent Application No. 10/789,000 filed

February 26, 2004

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

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**•Comments:**

Attached are:

Transmittal Form;

Notice of Appeal and Pre-Appeal Brief Request For Review;

Pre-Appeal Brief Request For Review; and

Notice of Appeal From The Examiner To The Board of Patent Appeals and Interferences

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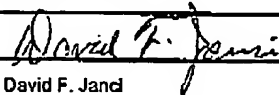
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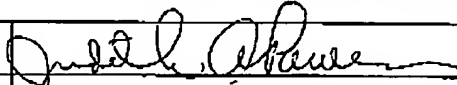
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<b>TRANSMITTAL FORM</b>  <small>(to be used for all correspondence after initial filing)</small>	Application Number	10789,000	
	Filing Date	February 26, 2004	
	First Named Inventor	Thomas M. Mayers et al	
	Art Unit	1772	
	Examiner Name	Alicia Chevalier	
Total Number of Pages in This Submission	8	Attorney Docket Number	3508

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Remarks _____		
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT		
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Signature		
Printed name	David F. Jand	
Date	October 17, 2006	Reg. No. 28,620

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Signature	
Typed or printed name	Judith A. Powers
Date	October 17, 2006

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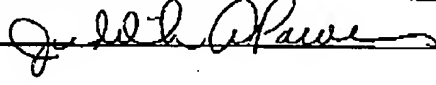
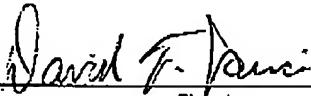
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<b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b>		Docket Number (Optional)  3608	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on <u>October 17, 2006</u> Signature <u></u> Typed or printed name <u>Judith A. Powers</u>		Application Number <u>10/789,000</u>	Filed <u>February 26, 2004</u>
		First Named Inventor <u>Thomas M. Mayers</u>	
		Art Unit <u>1772</u>	Examiner <u>Alicia Chevalier</u>
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.  This request is being filed with a notice of appeal.  The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.			
I am the <input type="checkbox"/> applicant/inventor. <input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96) <input checked="" type="checkbox"/> attorney or agent of record. Registration number <u>28,620</u> <input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____		<u></u> Signature <u>David F. Janci</u> Typed or printed name <u>(847) 970-5113</u> Telephone number <u>October 17, 2006</u> Date	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.			
<input checked="" type="checkbox"/> *Total of <u>2</u> forms are submitted.			

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PATENT

Attorney Docket No. 3608

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)	
Thomas M. Mayers et al	)	Examiner: Alicia A. Chevalier
Date Filed: February 26, 2004	)	
Application No.: 10/789,000	)	Group Art Unit: 1772
Confirmation No. 9213	)	

Title: ABUSE-RESISTANT CAST ACOUSTICAL CEILING TILE HAVING AN  
EXCELLENT SOUND ABSORPTION VALUE

Mail Stop AF  
Commissioner For Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

**NOTICE OF APPEAL AND PRE-APPEAL BRIEF**  
**REQUEST FOR REVIEW**

Sir:

In reply to the Final Office Action dated July 27, 2006, Applicants hereby file a NOTICE OF APPEAL from the Examiner to the Board of Patent Appeals and Interferences (Form PTO/SB/31 is enclosed herewith in duplicate. The Director is hereby authorized to charge any fees associated with this communication to Deposit Account No. 21-0425).

Applicants are also submitting a PRE-APPEAL BRIEF REQUEST FOR REVIEW in accordance with the U.S. Patent and Trademark Office Pilot Program as published in the Official Gazette Notices dated 12 July 2005. It is believed that there is no fee required in filing this Request For Review.

In response to the Final Office Action dated July 27, 2006, please consider the following remarks/arguments:

1. Remarks/Arguments begin on page 2 of this paper.

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Response dated October 17, 2006  
Reply to Office Action of July 27, 2006

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#### REMARKS/ARGUMENTS

Claims 1, 2, 4-7 and 9 have been rejected under 35 U.S.C. 102(b) as being anticipated by Forry et al (U.S. Patent No. 4,585,685). The Examiner continues to contend that the preamble in all of applicants' product claims, "an abuse-resistant, cast ceiling tile", is a statement with regard to the intended use and is not limiting in so far as the structure of the product is concerned. "Abuse-resistance" is a property of the product. Furthermore, there is no disclosure in the Forry et al reference concerning abuse-resistance.

Applicants' product is "cast" and this manufacturing procedure determines the structure of the product. Applicants' cast ceiling tile is made from a pulp mix and as disclosed on page 9, lines 3-9 of applicants' application, the pulp mix comprised 75.4 weight % starch gel and 24.6 weight % mineral wool fibers. Forry et al discloses that their dry-formed web product comprised 87% mineral wool and 13% powdered phenolic binder (Example 2, column 8, lines 11-17).

The Forry et al reference discloses (column 1, lines 42-48) that aggregate facing materials have not been successfully used to produce acoustical materials because the aggregate materials cannot be adequately adhered to the board when it is in the wet state and the consolidation which causes the aggregate to adhere to the wet board results in a densification of the board so that it is no longer acoustical. In contrast to this teaching by the Forry et al reference, applicants have discovered that aggregate materials can be adequately adhered to a cast board when it is in the wet state and the aggregate provides excellent abuse resistance. Furthermore, the consolidation of the aggregate to adhere it to the wet board does not impair the acoustical properties of the board, provided the board is made by a casting process. It is clearly demonstrated that applicants cast ceiling tile has a different structure than the wet laid board disclosed in Forry et al which enables the aggregate to be applied to the wet surface of the cast tile and consolidated into the surface without adversely affecting the acoustical properties.

Applicants' discovered that in order to obtain improved impact resistance the aggregate particles must have an average particle mean diameter of at least about 1,000 microns and preferably from about 1,400 microns to about 2,500 microns. There is no

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such teaching in Forry et al. The Examiner cites the statement in Example 2 of Forry et al (column 8, line 27) referring to "6 mesh"; however, the disclosure states that the "largest perlite particle" was about 6 mesh and it does not refer to an average particle mean diameter. Furthermore, only applicants teach that there is criticality in the particle size in order to obtain abuse-resistance.

The claims have been rejected under 35 U.S.C. 102(b) as being anticipated by Forry et al, and the Examiner contends that Forry et al discloses that the aggregate particles are selected from the group consisting of calcium carbonate, crushed marble, sand, clay, perlite, vermiculite, crushed stone and glass (column 4, lines 31-41). The Examiner has erroneously stated that the examples of aggregate disclosed in Forry et al in column 4 includes calcium carbonate, whereas there is no disclosure of calcium carbonate in the examples of aggregate recited in column 4.

Applicants contend that the reference (Forry et al) itself teaches that applicants' product has achieved unexpected results. In addition to the disclosure in Example 1 in Forry et al, wherein application of perlite to the wet surface of a wet laid board produced a ceiling tile having unacceptable acoustical performance, the disclosure in column 1, lines 42-48 of Forry et al demonstrates that applicants have invented a patentable ceiling tile by applying aggregate of a specific average particle mean diameter to the wet surface of a cast ceiling tile and compressing the aggregate into the surface of the wet tile which upon drying has excellent abuse resistance and excellent acoustical properties. The disclosure in Forry et al actually teaches away from applicants' invention.

Claims 1-9 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Baig (U.S. Patent Application Publication No. 2002/0139611). This reference issued as U.S. Patent No. 6,443,256. The principal disclosure in the Baig reference relied upon by the Examiner appears in Example 9 wherein it states that the mineral wool rich surface layer was coated with coarse calcium carbonate particles, and the dual layer ceiling tile had an estimated NRC of 0.50.

Example 9 in the Baig reference discloses that the mineral wool rich surface of the dual layer ceiling tiles was coated with dry calcium carbonate particles. Prior to applying the calcium carbonate, the tiles were painted with a roll coat and then with a

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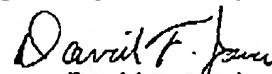
flow coat and dried. Thereafter, the calcium carbonate was spray coated onto the painted surface of the tiles, after which the tiles were spray painted.

There are several elements distinguishing applicants' ceiling tiles from the ceiling tiles disclosed in Example 9 of Baig. In Baig, the calcium carbonate particles were applied to a ceiling tile surface that had been painted and dried prior to the spray application of the calcium carbonate particles. In applicants' ceiling tile, the calcium carbonate particles are applied to the wet surface of the cast ceiling tile pulp and then are compressed into the wet surface to adhere the particles to the wet surface which is then dried. There is no compression procedure disclosed in Example 9 of Baig, but rather the particles are spray applied to a painted surface. Applicants do not apply the aggregate particles to a painted surface. Baig does not apply the calcium carbonate particles to a wet mineral wool surface.

The Examiner admits that Baig fails to disclose that the calcium carbonate particles have an average particle mean diameter of at least about 1,000 microns, and preferably ranging from about 1,400 microns to about 2,500 microns. The Examiner contends that it would require routine experimentation to determine the optimum value of the average particle mean diameter. However, applicants' calcium carbonate particles function to provide abuse-resistance. It was applicants who discovered that the average particle mean diameter is critical to obtaining improved abuse-resistance. There is no disclosure relative to abuse-resistance in the Baig reference.

For the reasons set forth above, applicants' claims are not anticipated by Forry et al and are patentable over the Baig reference.

Respectfully submitted,



David F. Janci  
Attorney for Applicant  
Reg. No. 28,620

October 17, 2006  
USG Corporation  
700 N. Highway 45  
Libertyville, IL 60048  
(847) 970-5113